

In the Claims:

1. (Currently Amended) A sample holder for centrifuging samples ~~use~~ in centrifugal evaporators that include heating means to assist the evaporation process, wherein the sample holder is formed from a material having high thermal conductivity, and is adapted to receive containers each containing a sample to be evaporated, and the containers are mounted in the holder, so that neither the latter sample containers nor their contents can receive radiant heat directly from the heat source, but only from the holder.
2. (Original) A sample holder according to claim 1 which is in the form of a block of high thermal conductivity material.
3. (Previously presented) A sample holder according to claim 1 which is formed from aluminium.
4. (Previously presented) A sample holder according to claim 1 of which the cross-section is selected so that in use no appreciable temperature gradients exist therein during evaporation.
5. (Previously presented) A sample holder according to claim 1 having sample containers mounted directly therein.
6. (Previously presented) A sample holder according to claim 1 in which the sample containers are mounted in one or more intermediate holders which in turn are mounted in recesses in the sample holder.
7. (Previously presented) A sample holder according to claim 1 in which the sample containers are held at a fixed angle to the vertical between 35° and 65° and orientated such that the force exerted on the contents when the centrifugal evaporator rotates them tends to retain the contents in the containers.

8. (Previously presented) A sample holder according to claim 1 in combination with at least one other sample holder to form a stack with a spacing member between adjoining holders in good thermal contact therewith, so that the temperature of one holder will tend to be the same as the temperature of the other.

9. - 11. (Cancelled)

12. (Currently amended) A method of heating samples, during centrifuging in a centrifugal evaporator to assist in evaporating solvent therefrom and leave dry residue sample material, previously dissolved in the solvent, comprising the steps of mounting the samples in good thermal contact with a mass of high thermal conductivity material forming a sample holder, and supplying energy to heat the sample holder and in turn the samples, wherein the sample holder shields the samples from direct heat energy, whereby the samples receive no heat directly, but only via the mass of high thermal conductivity material forming the sample holder.

13. (Currently amended) A method of preventing early to dry samples during centrifuging in a centrifugal evaporator from overheating as energy is supplied to evaporate solvent in other samples, in which the sample containers are located in a sample holder comprising a mass of highly thermally conductive material whereby temperature gradients within the assembly are minimized and the existence of liquid in samples which are still evaporating prevents dried sample material from reaching a temperature at which damage can occur to the material, and wherein the sample containers are shielded from direct heat energy by the sample holder material, and the temperature of the latter is monitored and the heat energy is reduced or cut off if the temperature of the holder rises above a predetermined value.

14. - 15. (Cancelled)

16. (New) A centrifugal evaporator comprising a vacuum chamber, drive means, heating means and a sample holder according to claim 1, the drive means being operable to rotate the sample holder in the vacuum chamber and the heating means being operable to supply heat to the sample holder.

17. (New) A centrifugal evaporator according to claim 9, wherein the heating means is a source of radiant heat.

18. (New) A centrifugal evaporator according to claim 9, wherein the heating means is an RF induction heater or a source of microwave energy.